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10/747,726	12/29/2003	Chung-Wen Wang	252011-1380	2029
47390 7590 09/02/2009 THOMAS, KAYDEN, HORSTEMEYER & RISLEY LLP 600 GALLERIA PARKWAY, 15TH FLOOR ATLANTA, GA 30339				
EXAMINER ANDERSON, FOLASHADE				
ART UNIT		PAPER NUMBER		
3623				
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09/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/747,726

**Applicant(s)**

WANG ET AL.

**Examiner**

FOLASHADE ANDERSON

**Art Unit**

3623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/04/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-6,9-11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,9-11 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This non-final office action in response to Applicant's submission filed on 09/01/2008. Currently, claims 1, 4-6, 9-11, and 14-21 are pending. Claims 1, 4, and 5 are amended. Claims 2, 3, 7, 8, 12, and 13 were previously canceled.

### ***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues with respect to the 35 U.S.C. 101 rejection that claims 1, 4, and 5 have been amended to include the recitation of a "computer-implemented method" thus meeting the tied to another statutory class requirement for method claims. However the cited tie is contained in the preamble and is not functionally involved in the method steps thus it has not been given patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). A machine or apparatus not functionally involved in the method steps is interpreted as insignificant extra-solution activity which will not transform an unpatentable principle into a patentable process.

3. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues with respect to the 35 U.S.C. 112, second paragraph rejection that

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"that this limitation is readily understood by one of ordinary skill. That is, 'wherein the route information records a plurality of tools' means the route information comprises a record of a plurality of tools." The Examiner respectfully disagrees with Applicant's assertion. The term "tool" is extremely generic in the art of distribution of resources or for scheduling in a business or commercial environment (business method class 705/008). The term could mean anything from the cell information to a product meant for shipment. The instant specification (p. 7, lines 23-25) nor claim language places an intended limit on the term as Applicant claims "one of ordinary skill in the art in light of the specification would understand that 'tools' are machines that process products," thus the claimed limitation is not enabled.

4. Applicant's arguments with respect to the 35 U.S.C. 103 have been considered but are moot in view of the new ground(s) of rejection. For clarity of the record it is noted that Applicant argues:

- a. The cited art with respect to claim 1 is legally deficient and does not teach or reasonably suggest a "delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements and floating delivery time requirements"
- b. The cited art with respect to claim 1 is legally deficient and does not teach or reasonably suggest a "reserving product capacity for the customers in accordance with the different categories"

- c. The cited art with respect to claim 6 is legally deficient and does not teach or reasonably suggest a "delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements and floating delivery time requirements"
- d. The cited art with respect to claim 6 is legally deficient and does not teach or reasonably suggest a "reserving product capacity for the customers in accordance with the different categories"
- e. The cited art with respect to claim 11 is legally deficient and does not teach or reasonably suggest "a customer interface . . . delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements and floating delivery time requirements"
- f. The cited art with respect to claim 11 is legally deficient and does not teach or reasonably suggest "a controller computer . . . classify the customers into a plurality of different categories according to the historical customer delivery data and reserving production capacity in accordance with the categories."
- g. The cited art with respect to claim 16 is legally deficient and does not teach or reasonably suggest "a capacity model having route information for the product, wherein the route information records a plurality of tools"

h. The cited art with respect to claim 16 is legally deficient and does not teach or reasonably suggest "a capacity management module configured to reserve capacity according to the demand plan."

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1, 4 and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

With respect to independent claim 1, the claim language recites the steps of acquiring historical customer delivery data, classifying the customer, reserving production capacity, etc., however the claim language does not include the required tie or transformation.

Claims 4 and 5 are rejected based upon the same rationale, wherein the claim language does not include the required tie or transformation.

It is further noted that Applicant has amended claims 1, 4 and 5 to include in the preamble "computer-implemented" however this is considered a nominal tie that does not satisfy the requirement, wherein a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 16-21 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 16 recites "**wherein the route information comprises a records a plurality of tools**". The only support for this limitation is found on pg. 7, lines 23-25. No further clarification is provided in the specification as to the boundaries or an explanation of "**tools**;" therefore Applicant has not properly defined the term in a manner that would

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allow one of ordinary skill in the art to use said disclosure without undue experimentation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites **"wherein the route information comprises a records a plurality of tools"** it is unclear to the Examiner what Applicant means by records a plurality of tools. The only support for this limitation is found on pg. 7, lines 23-25. No further clarification is provided in the specification as to the boundaries or an explanation of **"tools."** For purposes of examination this limitation will be interpreted to mean delivery route information.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 6, 9, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh et al (US Patent 7,080,026 B2) in view of Kennedy (US Patent 6,188,989 B1) and Official Notice.



**In regards to claim 1 Singh et al discloses a computer implemented method for capacity reservation based on historical customer delivery data, comprising the steps of:**

- **acquiring historical customer delivery data of a plurality of customers (col. 9, lines 9-13;**
- **classifying the customers into a plurality of different categories according to the historical customer delivery data (col. 6, lines 49-53); and**

Singh teaches terms as an upper limit of capacity for forecast made based on historical data (col. 11, lines 28-33); however, Singh does not teach **reserving production capacity for the customers in accordance with the different categories.**

Kennedy teaches **reserving production capacity for the customers in accordance with the different categories** (col.3, lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the invention of Singh the **reserving production capacity for the customers in accordance with the different categories** as taught by Kennedy since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Neither Singh nor Kennedy expressly disclose **comprises delivery time requirements corresponding to each customer wherein the delivery time**

**requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements.**

Official notice is taken that fixed, floating and distributed delivery time requirement types were old and well know in the art at the time the invention was made to have for example manufactures require their supplier to delivery raw material at different intervals of time based on their need as is common practice in just in time manufacturing.

It would have been obvious to one of ordinary skill in the art to induce in the invention of Singh and Kennedy the old and well known features of **comprises delivery time requirements corresponding to each customer wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements** as taught by the Official Notice; since the claimed invention is merely a combination of old element and in the combination each element merely would have preformed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

With regards to claims 6 and 11 which are directed to the medium and system respectively for implanting the method and are almost identical to claim 1 are therefore rejected for the same reason given above.

In regards to claims 4, 9 and 14 Singh teaches wherein **classification further comprises:**

- **designating customers with fixed delivery time requirements as first category customers** (col. 6, lines 49-53; where the group may be given any title based on any criteria set by the user);
- **designating customers with distributed delivery time requirements as second category customers** (col. 6, lines 49-53; where the group may be given any title based on any criteria set by the user);; and
- **designating customers with floating delivery time requirements as third category customers**(col. 6, lines 49-53; where the group may be given any title based on any criteria set by the user);

With regards to claims 9 and 14 which are directed to the medium and system for implanting the method and are almost identical to claim 4 are therefore rejected for the same reason given above.

9. Claims 5, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh et (US Patent 7,080,026 B2) Kennedy (US Patent 6,188,989 B1) and Official Notice and in further view of Boarders et al (US Patent 7,139,721 B2).

In regards to claims 5, 10 and 15 Singh does not teach the following limitation; however Kennedy does disclose **wherein reservation further comprises:**

- **reserving capacity for the first category customers** (col. 3, lines 27-30);
- **calculating a first remaining capacity** (col. 5, lines 20-30)
- **calculating a second remaining capacity**(col. 5, lines 35-37);

Kennedy does not teach the following features; however Borders does teach:

- **reserving the first remaining capacity for the second category customers**  
(col. 16, lines 41-53 and fig. 10);
- **reserving the second remaining capacity for the third category customers**  
(col. 16, lines 41-53 and fig. 10);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the invention of Singh and Kennedy the **reserving** as taught by Borders since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

With regards to claims 10 and 15 which are directed to the medium and system for implanting the method and are almost identical to claim 3 are therefore rejected for the same reason given above.

10. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh et al (US Patent 7,080,026 B2) Kennedy (US Patent 6,188,989 B1) Official Notice and Borders et al (US Patent 7,139,721 B2). in further view of Shekar et al (US Publication 2003/0208392)

In regards to claim 16 Singh and Kennedy do not teach the following limitations however Borden does teach a **system of demand and capacity management, comprising:**

- **a capacity model having route information for the product, wherein the route information records a plurality of tools (0034).**

Boarden is silent on however Kennedy teaches Shekar teaches in an analogous art:

- **an allocation planning module configured to receive a demand plan for a product from a participating customer (0034);**
- **a capacity management module configured to reserve capacity according to the demand plan (0106; where capacity exception is the equivalent of reserving capacity).**

It would have been obvious to one of ordinary skill in the art to use the disclosure of Shekar in the invention of Huang to optimize resource plans across multiple networks.

Claim 17 which is directed to the system for implanting the method of calim1 and is almost identical to claim 1 is therefore rejected for the same reason given above in regards to claim 1.

Claim 18 which is directed to the system for implanting the method of calim1 and is almost identical to claim 2 is therefore rejected for the same reason given above in regards to claim 2.

Claim 19 which is directed to the system for implanting the method of calim1 and is almost identical to claim 3 is therefore rejected for the same reason given above in regards to claim 3.

Claim 20 which is directed to the system for implanting the method of calim1 and is almost identical to claim 4 is therefore rejected for the same reason given above in regards to claim 4.

Claim 21 which is directed to the system for implanting the method of claim 1 and is almost identical to claim 5 is therefore rejected for the same reason given above in regards to claim 5.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is (571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Folashade Anderson/

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Examiner, Art Unit 3623

/Beth V. Boswell/

Supervisory Patent Examiner, Art Unit 3623